

**Louisiana Department of Environmental Quality (LDEQ)  
Office of Environmental Services**

**STATEMENT OF BASIS**

**Maintenance Unit  
Cytec Industries Inc - Fortier Manufacturing Complex  
Waggaman, Jefferson Parish, Louisiana  
Agency Interest Number: 1357  
Activity Number: PER20030009  
Proposed Permit Number: 2236-V1**

**I. APPLICANT**

**Company:**

Cytec Industries Inc - Fortier Manufacturing Complex  
10800 River Rd  
Westwego, Louisiana 70094

**Facility:**

Maintenance Unit  
Cytec Industries Inc - Fortier Manufacturing Complex  
10800 River Rd  
Waggaman, Jefferson Parish, Louisiana  
Approximate UTM coordinates are 763.35 kilometers East and 3316.93 kilometers North, Zone 15

**II. FACILITY AND CURRENT PERMIT STATUS**

Cytec Industries Inc owns and operates Fortier manufacturing complex located south of Moisant Airport on the west bank of Mississippi River in Waggaman, Jefferson Parish, Louisiana. The maintenance unit is one of the operation units within the manufacturing complex.

The maintenance unit, Cytec Industries Inc. currently operates under Part 70 operating permit No. 2236-V0, issued April 27, 1999.

Cytec Industries Inc - Fortier manufacturing complex is a designated Part 70 source. Seven Part 70 permits have been issued to the operating units within the chemical manufacturing complex. These include:

**Maintenance Unit  
Cytec Industries Inc - Fortier Manufacturing Complex  
Waggaman, Jefferson Parish, Louisiana  
Agency Interest Number: 1357**

<b>Permit No.</b>	<b>Unit or Source</b>	<b>Date Issued</b>
594-V0	Sulfuric Acid Plant	04/28/2005
2236-V0	Maintenance Unit	04/27/1999
2195-V1	Acrylonitrile Plant	08/10/2006
2107-V0	Acrylamide Plant	09/25/2003
1981-V0	Urea/Melamine Plant	08/19/2004
2306-V1	Utilities Plant	12/16/2005

Four PSD permits addressing portions of the facility have already been issued. These include:

<b>Permit No.</b>	<b>Unit or Source</b>	<b>Date Issued</b>
PSD-LA-2	Sulfuric Acid Plant	05/25/1976
PSD-LA-575 (M-1)	Sulfuric Acid Plant	12/05/1994
PSD-LA-576 (M-1)	Acrylonitrile Plant	03/04/1998
PSD-LA-242	Cytec Fortier Plant	10/16/1979

Finally, two applications for Part 70 permits renewal/modification are still under review by the Department. These include:

<b>Permit No.</b>	<b>Unit or Source</b>
594-V1	Sulfuric Acid Plant
2195-V2	Acrylonitrile Plant

### **III. PROPOSED PROJECT/PERMIT INFORMATION**

#### **Application**

A permit application and Emission Inventory Questionnaire were submitted by Cytec Industries Inc on October 10, 2003 requesting to renew/modify the Part 70 operating permit.

#### **Project**

There is no project associated with this permit renewal/modification.

#### **Proposed Permit**

Permit 2236-V1 will be the renewal/modification of Part 70 operating permit 2236-V0 for the Maintenance Unit.

**Maintenance Unit**  
**Cytec Industries Inc - Fortier Manufacturing Complex**  
**Waggaman, Jefferson Parish, Louisiana**  
**Agency Interest Number: 1357**

**Permitted Air Emissions**

Estimated emissions in tons per year are as follows:

Pollutant	Before	After	Change
PM <sub>10</sub>	0.12	0.16	+0.04
SO <sub>2</sub>	0.04	0.04	-
NO <sub>x</sub>	0.001	0.001	-
CO	0.04	0.04	-
VOC	14.80	14.80	-

VOC LAC 33:III Chapter 51 Toxic Air Pollutants (TAPs):

Pollutant	Before	After	Change
Acetonitrile	0.02	0.02	-
Acrolein	0.009	0.009	-
Acrylic acid	0.009	0.009	-
Acrylonitrile	0.53	0.53	-
Ammonia	0.17	0.17	-
Benzene	0.03	0.03	-
Cumene	0.01	0.013	-
Ethyl Benzene	0.44	0.48	+0.04
Hydrochloric acid	0.004	0.004	-
Hydrogen cyanide	0.09	0.09	-
Methanol	0.48	0.50	+0.02
Methyl ethyl ketone	1.82	1.82	-
Methyl isobutyl ketone	0.10	0.059	-0.04
n-Hexane	0.04	0.04	-
Naphthalene	0.17	0.17	-
Styrene	0.12	0.12	-
Toluene	2.87	2.87	-
Xylene (mixed isomers)	2.36	2.36	-
Total	9.26	9.28	+0.02

Other VOC (TPY):

5.52

**Maintenance Unit  
Cytex Industries Inc - Fortier Manufacturing Complex  
Waggaman, Jefferson Parish, Louisiana  
Agency Interest Number: 1357**

**IV REGULATORY ANALYSIS**

This permit was reviewed for compliance with the Louisiana Part 70 operating permit program and Louisiana Air Quality Regulations. New Source Performance Standards (NSPS) and National Emission Standards for Hazardous Air Pollutants (NESHAP) do not apply.

**Applicability and Exemptions of Selected Subject Items**

The applicability of the appropriate regulations is straightforward and provided in the Facility Specific Requirements Section of the draft permit, or Table 2 of the Air Permit Briefing Sheet.

**Prevention of Significant Deterioration/Nonattainment Review**

There is no physical change in the method of operation, therefore the modifications/revisions proposed in this application do not trigger PSD review. Prevention of Significant Deterioration (PSD) does not apply.

**Streamlined Equipment Leak Monitoring Program**

Not Applicable

**MACT Requirements**

Not Applicable

**Air Quality Analysis**

Not Applicable

**General Condition XVII Activities**

The facility will comply with the applicable General Condition XVII Activities emissions as required by the operating permit rule. However, General Condition XVII Activities are not subject to testing, monitoring, reporting or recordkeeping requirements. For a list of approved General Condition XVII Activities, refer to the Section VIII – General Condition XVII Activities of the proposed permit.

**Insignificant Activities**

All Insignificant Activities are authorized under LAC 33:III.501.B.5. For a list of approved Insignificant Activities, refer to the Section IX – Insignificant Activities of the proposed permit.

**Maintenance Unit  
Cytec Industries Inc - Fortier Manufacturing Complex  
Waggaman, Jefferson Parish, Louisiana  
Agency Interest Number: 1357**

**V. PERMIT SHIELD**

There is no permit shield in the proposed permit.

**VI. PERIODIC MONITORING**

N/A

**VII. GLOSSARY**

Carbon Monoxide (CO) – A colorless, odorless gas, which is an oxide of carbon.

Maximum Achievable Control Technology (MACT) – The maximum degree of reduction in emissions of each air pollutant subject to LAC 33:III.Chapter 51 (including a prohibition on such emissions, where achievable) that the administrative authority, upon review of submitted MACT compliance plans and other relevant information and taking into consideration the cost of achieving such emission reduction, as well as any non-air-quality health and environmental impacts and energy requirements, determines is achievable through application of measures, processes, methods, systems, or techniques.

Hydrogen Sulfide (H<sub>2</sub>S) – A colorless inflammable gas having the characteristic odor of rotten eggs, and found in many mineral springs. It is produced by the reaction of acids on metallic sulfides, and is an important chemical reagent.

New Source Review (NSR) – A preconstruction review and permitting program applicable to new or modified major stationary sources of air pollutants regulated under the Clean Air Act (CAA). NSR is required by Parts C ("Prevention of Significant Deterioration of Air Quality") and D ("Nonattainment New Source Review").

Nitrogen Oxides (NO<sub>x</sub>) – Compounds whose molecules consist of nitrogen and oxygen.

Organic Compound – Any compound of carbon and another element. Examples: Methane (CH<sub>4</sub>), Ethane (C<sub>2</sub>H<sub>6</sub>), Carbon Disulfide (CS<sub>2</sub>)

Part 70 Operating Permit – Also referred to as a Title V permit, required for major sources as defined in 40 CFR 70 and LAC 33:III.507. Major sources include, but are not limited to, sources which have the potential to emit: ≥10 tons per year of any toxic air pollutant; ≥25 tons of total toxic air pollutants; and ≥100 tons per year of regulated pollutants (unless regulated solely under 112(r) of the Clean Air Act) (25 tons per year for sources in non-attainment parishes).

**Maintenance Unit**  
**Cytex Industries Inc - Fortier Manufacturing Complex**  
**Waggaman, Jefferson Parish, Louisiana**  
**Agency Interest Number: 1357**

PM<sub>10</sub> – Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by the method in Title 40, Code of Federal Regulations, Part 50, Appendix J.

Potential to Emit (PTE) – The maximum capacity of a stationary source to emit any air pollutant under its physical and operational design.

Prevention of Significant Deterioration (PSD) – A New Source Review permitting program for major sources in geographic areas that meet the National Ambient Air Quality Standards (NAAQS) at 40 CFR Part 50. PSD requirements are designed to ensure that the air quality in attainment areas will not degrade.

Sulfur Dioxide (SO<sub>2</sub>) – An oxide of sulfur.

Sulfuric Acid (H<sub>2</sub>SO<sub>4</sub>) – A highly corrosive, dense oily liquid. It is a regulated toxic air pollutant under LAC 33:III.Chapter 51.

Title V Permit – See Part 70 Operating Permit.

Volatile Organic Compound (VOC) – Any organic compound, which participates in atmospheric photochemical reactions; that is, any organic compound other than those, which the administrator of the U.S. Environmental Protection Agency designates as having negligible photochemical reactivity.